



Maine Farm Safety Program

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Combines and Corn Picker Safety

Good safety habits are important for anyone who operates a combine, corn picker or other grain harvesting machine. Failure to observe safety practices can be fatal. These machines have many moving parts that need regular adjusting and maintenance. Begin preparing machinery for harvest in the off-season, at least several weeks before using them. It takes time to get these machines into efficient, safe operating condition.

◆ Driving Combines

Combine operators must be comfortable and able to reach the controls easily to operate the equipment safely. Discomfort is not only distracting, but it also contributes to fatigue. Adjust the seat to your height and reach. Most modern combines have an adjustable steering column for different arm lengths or the standing position.

Because of the large size of modern combines, extra room is

needed for turning, passing through gates and general maneuvering. Know the physical dimensions of your machine. Novice operators must develop a sense of how quickly the back of the self-propelled combine swings around when turning. This is especially important when operating near obstructions or traveling on public roads. The combine could swing into the path of another vehicle or obstacle if the operator does not allow for this hazard.

Combines and Corn Picker Safety

- ◆ Know the physical dimensions of the harvester you are operating.
- ◆ Maintain a “no seat, no rider” policy.
- ◆ Stop all machinery while attempting to unclog it.



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There are two brake pedals that control the individual drive wheels. When used separately, these pedals help with turns. Used together, they stop the combine in a straight line. Uneven brake application will cause the combine to swerve, especially at high speeds.

◆ **Combines**

Before operating a combine, remove as many obstacles as possible from the field. Mark any remaining obstacles with a tall pole or stake so they can be seen clearly in the mature crop. Stay a good distance away from ditchbanks that could shear under a combine's weight. Maintain a grass, buffer strip at the edge of all ditches at least as wide as the combine's wheel track.

If two or more people are needed to position, adjust or service a machine, make sure everyone knows what is being done and how to communicate with others. Use

standard agriculture hand signals. Keep everyone else away from the controls while you are working, unless they are needed to help. Block headers so they cannot fall while being worked on. Check for overheated bearings and overloaded or slipping belts. They are possible fire hazards.

Keep the steps and walking surfaces of the combine free of grease and dirt. Use handrails to mount and dismount safely. Frost-covered sheet metal is very slippery. Avoid using the operator's platform for storage because the room is needed for the operator. Stored items may be in the way and cause a slip or fall.

Uniform feeding of a crop in good condition provides a smooth flow through the combine and results in fewer breakdowns. To achieve uniform feeding, use good tillage and planting practices and cut the crop evenly. Make sure the header is the right size for the crop and combine. Operate the header and combine at the proper speed.

◆ **Lodged Crops**

Crops lodged in equipment add to harvest time stress. Many growers only plant varieties with good stand characteristics. Growth regulators can be used to minimize the potential for lodging in some cereal crops. If a crop is down, special attachments, such as pickup reels, dividers and gathering devices, protect the combine and reduce operator fatigue. You will have to travel slower in a lodged crop. Just keep reminding yourself that you will finish faster if you can avoid plugged machines.

◆ **Clogged Combines**

To clear a clogged combine, first try reversing the header. If this does not work, stop the combine as quickly as possible. Shut off the





engine and pocket the key before attempting to clear the machine. The main drive shaft or cylinder should be turned with tools designed for that purpose. Hands should be clear of the combine's mechanism while the drives are turning. Once the plug has been cleared, remove all tools and replace shields before starting the combine.

If the grain gets clogged during unloading, stop the auger before trying to free the grain. Use a small shovel or stick to break the bridging. Never use your hands or feet to remove trash or to push the last bit of grain in the unloading auger. Stop the auger and use a broom.

◆ **Other Combine Precautions**

When leaving a harvesting machine, even for a short time, make sure the header is down on the ground or floor, supported by solid blocks, or in the up position with the safety latch on. Shut off the engine, set the parking brake and leave the transmission in gear to prevent the combine from moving. Remove the ignition key.

Specialists agree that farm equipment operators should “just say no” to extra riders. Most farm machinery is designed for specialized types of work. It is not meant to carry passengers unless equipped with a special seat.

◆ **Corn Picker Hazards**

Operation of ear corn pickers and picker/shellers requires many of the same precautions as outlined for combine use.

Never attempt to clear clogged snapping rolls while the power is engaged. Countless farmers have lost fingers or hands trying to pull a stalk free from an operating picker. You cannot let go of the stalk in time if it clears itself. Shut down the machine before attempting to clear a plugged cylinder on a picker/sheller.

Husking rolls can catch gloves, fingers or hands. Always disengage power before doing any cleaning or adjusting around the husking bed.

Anyone who operates combines, corn pickers and other grain harvesting machines needs to learn good safety habits and practice them. Following the safety guidelines outlined in this section will help to lessen accidents during harvest.

When leaving a harvesting machine, even for a short time, make sure the header is down on the ground or floor, supported by solid blocks, or in the up position with the safety latch on.



This Maine Farm Safety Fact Sheet is part of an educational fact sheet series produced by the University of Maine Cooperative Extension. For more information on farm safety, contact your county Extension office.



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